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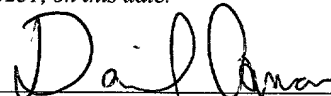
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hirano et al. )  
Serial No. )  
Filed: March 5, 2002 )  
For: MAGNETIC DISK )  
DRIVE SYSTEM )  
Art Unit: )

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PRELIMINARY AMENDMENT

Box Patent Application  
Assistant Commissioner for Patents

Dear Sir:

Prior to examination of this application and calculation of the filing fee, please amend the application as follows:

In the Claims:

Please amend claims 6, 7, 9, 12, 17, 19, 20, 22 and 25-27 as follows:

6. (Amended) The magnetic disk drive system of claim 5, wherein the data for distance measurement is written in the sectors of all of the tracks of said disk at the same write timing and said distance is measured at said sectors.

7. (Amended) The magnetic disk drive system of claim 5, wherein the data for distance measurement is written in the sectors of a plurality of the tracks selected of

said disk at the same write timing, and said distance is measured at said sectors.

9. (Amended) The magnetic disk drive system of claim 3, wherein the data for distance measurement is written in a position predetermined with reference to said servo information.

12. (Amended) The magnetic disk drive system of claim 3, wherein the head-distance measuring means obtains the position of the read head at the time when reading the written data for distance measurement, and computes said distance.

17. (Amended) The magnetic disk drive system of claim 13, wherein said position of the read head is detected by including the end position of the data for distance measurement in the search window opened at the read timing of the read head.

19. (Amended) The magnetic disk drive system of claim 13, wherein the read head performs the read operation at the same read timing for the plurality of said sectors in which the data for distance measurement has been written.

20. (Amended) The magnetic disk drive system of claim 1 or claim 2, wherein a plurality of positions, where said distances are measured, in the radial direction of the disk, are selected, and said distances, which are not measured, in relation to the other

positions, are determined by interpolation based on said distances measured in correspondence with said positions.

22. (Amended) The magnetic disk drive system of claim 1 or claim 2, wherein the distance measured by the head-distance measuring means is stored.

25. (Amended) The magnetic disk drive system of claim 22, wherein said distance is measured and stored when the power of the system is turned on.

26. (Amended) The magnetic disk drive system of claim 22, wherein said distance is read out when the power of the system is turned on.

27. (Amended) The magnetic disk drive system of claim 22, wherein when data is written on said disk, the write timing of the write head is determined by adding said distance to the position where the data is written.

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment, captioned "**Version with markings to show changes made.**"

Applicants respectfully request these claims be considered with the examination of this application.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

In the Claims:

Claims 6, 7, 9, 12, 17, 19, 20, 22 and 25-27 were amended as follows:

6. (Amended) The magnetic disk drive system of ~~claim 4 or~~ claim 5, wherein the data for distance measurement is written in the sectors of all of the tracks of said disk at the same write timing and said distance is measured at said sectors.

7. (Amended) The magnetic disk drive system of ~~claim 4 or~~ claim 5, wherein the data for distance measurement is written in the sectors of a plurality of the tracks selected of said disk at the same write timing, and said distance is measured at said sectors.

9. (Amended) The magnetic disk drive system of ~~any one of~~ claim 3 to ~~claim 8~~, wherein the data for distance measurement is written in a position predetermined with reference to said servo information.

12. (Amended) The magnetic disk drive system of ~~any one of~~ claim 3 to ~~claim 11~~, wherein the head-distance measuring means obtains the position of the read

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head at the time when reading the written data for distance measurement, and computes said distance.

17. (Amended) The magnetic disk drive system of ~~any one of claim 13 to claim 16~~, wherein said position of the read head is detected by including the end position of the data for distance measurement in the search window opened at the read timing of the read head.

19. (Amended) The magnetic disk drive system of ~~any one of claim 13 to claim 18~~, wherein the read head performs the read operation at the same read timing for the plurality of said sectors in which the data for distance measurement has been written.

20. (Amended) The magnetic disk drive system of ~~any one of claim 1 to or claim 32~~, wherein a plurality of positions, where said distances are measured, in the radial direction of the disk, are selected, and said distances, which are not measured, in relation to the other positions, are determined by interpolation based on said distances measured in correspondence with said positions.

22. (Amended) The magnetic disk drive system of ~~any one of claim 1~~  
~~to~~ claim 21~~2~~, wherein the distance measured by the head-distance measuring means is  
stored.

25. (Amended) The magnetic disk drive system of ~~any one of claim 22~~  
~~to claim 24~~, wherein said distance is measured and stored when the power of the system  
is turned on.

26. (Amended) The magnetic disk drive system of ~~any one of claim 22~~  
~~to claim 25~~, wherein said distance is read out when the power of the system is turned on.

27. (Amended) The magnetic disk drive system of ~~any one of claim 22~~  
~~to claim 26~~, wherein when data is written on said disk, the write timing of the write head  
is determined by adding said distance to the position where the data is written.